Amendments to the Specification:

Please replace the paragraph beginning on page 9, line 18, and continuing through page 10, line 18, of the Preliminary Amendment filed Aug. 10, 2001, with the following rewritten paragraph:

Returning now to block 310, if it is determined that n is not less than X, processing proceeds ~~to block 330 where a check is performed to determine if the sequence number, n, is greater than or equal to the pre-determined parameter X. If the check proves to be negative, processing terminates at block 360. However, if the sequence number is greater than or equal to the pre-determined parameter X, processing proceeds~~ to block 340 where the VCI ~~VIC~~ value is calculated using the following formula:

$$VCI = 33 + [\text{mod}((n-1)/(X-1))-1] * 8 + Mpos,$$

where: n = CO DSLAM Sequence Number

X = Pre-defined ADSL Network Physical Parameter

Mpos = ADSL Port Position on Contributing RAM

It will be observed that block 340 implements the "recycling" of VCI values. As noted in the example above, if there are only 991 available VCI values, then it is not possible to assign a unique VCI value to subscribers connected to RAMs in excess of 123 (i.e., for a 124^{th} RAM, the calculation would be $33 + (124-1)*8 + Mpos$. $33+(124-1)*8 = 1017$, which means that, according to the formula of block 320, the eight VCI values for a 124^{th} RAM would range from 1017 through 1024, and 1024 is an unacceptable value given the physical parameters of the system. Thus, the solution ~~is,~~ is to use the remainder when (n-1) is divided by (X-1). This essentially causes VCI values to be reused when the number of RAMs exceeds X. When VCI values are recycled, the VPI value must be changed in order to ensure that a unique VPI/VCI

combination is assigned to each subscriber. For example, after the 123rd RAM, the VPI value could be incremented by one, so that recycling of VCI values does not cause collisions among subscribers in the combined VPI/VCI value.

Please replace the paragraph beginning on page 2, line 11, of the original application with the following rewritten paragraph:

Although averting costs and the expenditure of resources by using existing public networks, DSL and ADSL service providers face many challenges in implementing this service on existing public networks. Among these challenges is the provisioning of ADSL network resources for each subscriber. Provisioning is a process that yields an end-to-end permanent virtual circuit (PVC) between the subscriber and the Internet Service Provider (ISP)/Network Service Provider (NSP). Included in the provisioning process is the configuration of various ADSL network hardware to enable the ADSL network to recognize and service participating users. The ADSL network hardware employs a number of configuration variables to establish a PVC. These configuration variables include the Virtual Path Identifier (VPI) and the Virtual Circuit Identifier (VCI). The VPI and VCI variables are integers, that when used in combination provide unique identifiers for each PVC ~~VPC~~ and, correspondingly, for each subscriber. Generally, the assignment of values for the VPI and VCI variables is performed randomly by the provisioning process (e.g. provisioning software). As such, it is very difficult to arbitrarily determine any VCI value or any VPI value once assigned.

Please replace the paragraph beginning on page 5, line 27, of the original application with the following rewritten paragraph:

Given that the ADSL technology exploits existing public information networks, the demand for ADSL ~~ASDL~~ service is great and it is important to be able to efficiently and reliably provide ADSL to interested subscribers. Realizing that customer satisfaction is tantamount to success, network providers have been driven to develop new processes, hardware, and software to better enhance a potential subscriber's experience when subscribing to the ADSL service. Furthermore, network providers have developed and are developing innovations which facilitate the internal provisioning of ADSL services to potential subscribers. Network providers are striving to reach a point where configuring and using ADSL services is as easy for a user as using today's analog dial-up technologies – if not easier. As such, ADSL service providers have developed automated processes that assist the subscriber in implementing and configuring ADSL equipment to realize ADSL services.